



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/599,458

07/25/2008

Yasuji Saito

SI08-P06637US

9247

33356 7590 06/02/2010
SoCAL IP LAW GROUP LLP
310 N. WESTLAKE BLVD. STE 120
WESTLAKE VILLAGE, CA 91362

EXAMINER

PHAN, HAI

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

06/02/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,458	Applicant(s) SAITO ET AL.	
	Examiner Hai Phan	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/20/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, in line 10, the term “the value of the generated intermediate frequency signal” lacks antecedent basis and is not clear which element produces this value. It is further not clear what unit produces the “first detection signal” by level detection, as indicated in lines 3-4. In lines 16, it is not clear which of the “intermediate frequency signal” it refers to since there seems to be multiple IF signals are being referred to in the claim (i.e. the IF signal at the current time and IF signal at a predetermined time earlier, see line 4 and lines 7-8 for their references).

Regarding claim 3, the term “the first electric field intensity” lacks antecedent basis (note that this claim is now dependent on claim 1, where only claim 2 refers to the first electric field intensity).

Regarding claim 4, it is not clear under which electric field intensity the noise elimination controlling unit outputs the first detection signal and under which electric field intensity it outputs the second detection signal.

Regarding claim 7, the use of the term “intermediate frequency signal” in multiple places throughout the claim to refer to different IF signals generated at different time appears confusing (for example line 13). It is recommended that first, second, etc to be added before each of the term to clarify which IF signal it refers to. In line 6, the term “the value of the generated intermediate frequency signal” lacks antecedent basis and is not clear which element produces this value.

Specification

3. The disclosure is objected to because of the following informalities:

In paragraph [0021], page 6 of the specification, the brief description of the drawings refers to Fig. 4, where the drawings show Fig. 4A and Fig. 4B.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsujishita et al (Pub No. US 2001/0016475; hereinafter referred to as Tsujishita).

Art Unit: 2614

Regarding claims 1 and 7, Tsujishita discloses a noise eliminating circuit (Fig. 5, 7, 9, 11, 14 or 15) comprising a noise elimination processing unit (Fig. 14, element 20) that interpolate a generation period of pulse noise overlapped with a received signal (see paras. 0076 and 0077 for interpolation), a predicting unit (Fig. 14, element 56), a detecting unit (Fig. 14, element 54), and noise elimination controlling unit (Fig. 14, element 18) for generating either the first detection signal or the second detection signal based on the electric field intensity produced by element (12).

Regarding claims 2-5, Tsujishita further discloses that the received broadcast signal can be strong or weak thus creating different levels when detecting noise (see para 0004). Thus, when the broadcast signal is strong, a first electric field intensity is used while the broadcast signal is weak, a second electric field intensity is referenced (see para 0048). Thus, the noise elimination controlling circuit (18) outputs the corresponding detection signal based on these electric field intensity levels.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 2614

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsujishita et al (Pub No. US 2001/0016475; hereinafter referred to as Tsujishita).

Regarding claim 6, Tsujishita discloses the noise eliminating circuit is used in the frequency-modulated radio receiver (para 0038), but fails to state that the signal could have been amplitude-modulated. However, amplitude-modulation is very well-known and would have been obvious to a person of ordinary skill in the art at the time the invention was made to substitute the frequency-modulation as taught by Tsujishita with the amplitude-modulation as an alternative type of modulation.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Phan whose telephone number is (571) 272-6338. The examiner can normally be reached on Monday-Friday (9:00AM-5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CURTIS KUNTZ/
Supervisory Patent Examiner, Art Unit 2614

/Hai Phan/
Examiner, Art Unit 2614